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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,592	10/01/2001	Akinobu Nakabo	O3020.0269/P269	4001

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EXAMINER

PAIK, STEVE S

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 03/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/966,592

Applicant(s)

NAKABO, AKINOBU

Examiner

Steven S. Paik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, 8-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Yasuma et al. (US 4,839,509).

Re claims 1-4, 10, 11, Yasuma et al. discloses an IC card reading and /or writing device and its connecting device comprising:

an actuator (23) including a movable plunger (23a) coupled a shaft 25 in Figure 4.

Although reference numerals are not clearly labeled, the connecting elements between 23a and 25 appear to include an inherent connecting element such as a pin);

a depressing member (21) pivotably movable in relation to said plunger (23a)

a movable support (33 and 60) including an IC contact point (62) and a pawl member (92), said movable support being movable by said depressing member (21 via guide rods 50);  
and

wherein the force of an IC card (K) moved into contact with said pawl member (92) moves said movable support (31-33) such that said IC contact point (62) contacts with the IC

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card (K). Figures 1-6 and 11-16 disclose a contact unit of an IC card reader including the recited elements of the claimed invention. The transport mechanism comprises a motor and shafts coupled to move an IC card within a guided transport direction (X), a feed roller (21) to guide and depress the IC card (K) within a card travel path along the transport direction. The contact unit further comprises a movable support (31-33) having an IC contact probe (62) and a pawl member (92), which are movable by the transport mechanism through guide rods (50) and a link. The guide rods supports a sliding motion of the IC card traveling in the transport direction. Yasuma et al. further teaches or fairly suggests the contact unit including a guide portion (31a and 32b) having a front guide holes and a back guide holes in Fig. 12.

Re claim 5, the contact unit disclosed by Yasuma et al. as recited in rejected claim 4 stated above, where the front guide (31a in Fig. 12) holes comprise a horizontal portion, a slant portion, and a vertical portion (bottom portion of the figure 12).

Re claim 8, the contact unit disclosed by Yasuma et al. as recited in rejected claim 4 stated above, comprising urging means (92) which exerts a bias in a direction away from the card transfer line (40) on said movable support (33).

Re claim 9, the contact unit disclosed by Yasuma et al. as recited in rejected claim 8 stated above, wherein said urging means (92) comprises a spring (91) attached to said unit main body and said guide member.

Re claims 12-14, and 17, Yasuma et al. discloses an IC card reading and /or writing device and its connecting device comprising:

a card reader main body (10);

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a plurality of transfer rollers (21 and 22) disposed about a card transfer line (40) formed in said card reader main body; and an IC contact unit, comprising:

an actuator (23) including a movable plunger (23a) coupled a shaft 25 in Figure 4.

Although reference numerals are not clearly labeled, the connecting elements between 23a and 25 appear to include an inherent connecting element such as a pin);

a depressing member (21) pivotably movable in relation to said plunger (23a)

a movable support (33 and 60) including an IC contact point (62) and a pawl member (92), said movable support being movable in a direction of the card transfer line (40) by said depressing member (21 via guide rods 50); and

wherein the force of an IC card (K) moved by said transfer rollers (21 and 22) into contact with said pawl member (92) moves said movable support (31-33) such that said IC contact point (62) contacts with the IC card (K). Figures 1-6 and 11-16 disclose a contact unit of an IC card reader including the recited elements of the claimed invention. The transport mechanism comprises a motor and shafts coupled to move an IC card within a guided transport direction (X), a feed roller (21) to guide and depress the IC card (K) within a card travel path along the transport direction. The contact unit further comprises a movable support (31-33) having an IC contact probe (62) and a pawl member (92), which are movable by the transport mechanism through guide rods (50) and a link. The guide rods supports a sliding motion of the IC card traveling in the transport direction. Yasuma et al. further teaches or fairly suggests the contact unit including a guide portion (31a and 32b) having a front guide holes and a back guide holes in Fig. 12.

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Re claim 15, the contact unit disclosed by Yasuma et al. as recited in rejected claim 14 stated above, where the front guide (31a in Fig. 12) holes comprise a horizontal portion, a slant portion, and a vertical portion (bottom portion of the figure 12).

Re claim 16, the contact unit disclosed by Yasuma et al. as recited in rejected claim 13 stated above, comprising urging means (92) which exerts a bias in a direction away from the card transfer line (40) on said movable support (33), where said urging means (92) comprises a spring (91) attached to said unit main body and said guide member.

Re claim 18, Yasuma et al. discloses an IC card reading and /or writing device and a method for reading information on an IC card (K), comprising the steps of:

- moving the IC card (K) along a card transfer line (40);
- contacting the IC card with a movable support (33 and 60);
- utilizing the force from the movement of the IC card to move the movable support such that an IC contact point (62) located on a lower surface of the movable support contacts with the IC card (K); and

reading information on the IC card (col. 5, lines 7-12).

Re claim 19, Yasuma et al. discloses an IC card reading and /or writing device and a method as recited in rejected claim 18 stated above, where the moving step comprises translating rotational movement of a plurality of transfer rollers (21 and 22) to the IC card (K) along the card transfer line (40).

Re claim 20, Yasuma et al. discloses an IC card reading and /or writing device and a method as recited in rejected claim 19 stated above, further comprising guiding the movement of the movable support (33 and 60 via guide rods 50).

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***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasuma et al. (US 4,839,509) in view of Owa (US 5,917,177 cited by the applicant).

As stated above, Yasuma et al. teaches, in figures 1-6 and 11-16, a contact unit of an IC card reader including the recited elements of the claimed invention. The transport mechanism comprises a motor and shafts coupled to move an IC card within a guided transport direction (X), a feed roller (23) to guide and depress the IC card (K) within a card travel path along the transport direction. The contact unit further comprises a movable support (31-33) having an IC contact probe (62) and a pawl member (92), which are movable by the transport mechanism through guide rods (50) and a link. The guide rods supports a sliding motion of the IC card traveling in the transport direction. Yasuma et al. further teaches or fairly suggests the contact unit including a guide portion (31a and 32b) having a front guide holes and a back guide holes in Fig. 12.

However, he fails to disclose or fairly suggest the back guide holes having a horizontal portion, a slant portion and a pair of shafts.

Owa discloses an IC card reader comprising a guide portion (24) having a horizontal portion; a slant portion (24 in Fig. 1) and a pair of shafts (23 and 25 in Fig. 4) to properly support

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the transporting path of an IC card. It would have been an obvious design variation to manufacture an IC card having different shapes of a transport path-guiding element.

In view of Owa reference, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to design a transport path guide portion in an IC card reader having a horizontal and a slant portion in addition to the guide portion of Yasuma et al. since it is an obvious matter of design variation, well within the ordinary skill in the art, and therefore an obvious expedient.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chalendard (USD 4,795,897) discloses an apparatus for reading a portable data-carrying device that includes a guiding unit to properly contact the electronic elements.

Mita (US 4,904,852) discloses an IC card reader including a plurality of contact members to contact with a plurality of contacts of an IC card for transmitting and receiving data to and from a circuit in the card.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 703-308-6190. The examiner can normally be reached on Mon - Fri (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-6893 for regular communications and 703-308-7722 for After Final communications.



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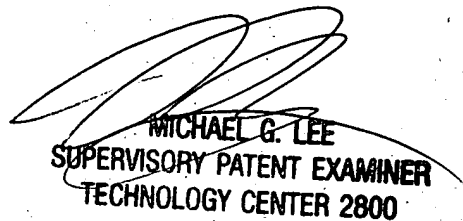
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0530.

*Steven Paik*

Steven S. Paik  
Examiner  
Art Unit. 2876

ssp

March 3, 2003

  
MICHAEL G. LEE  
SUPERVISORY PATENT EXAMINER  
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